



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,307	03/12/2004	Takahiro Hosomi	M1909.1125	5792

32172 7590 01/11/2007

DICKSTEIN SHAPIRO LLP
1177 AVENUE OF THE AMERICAS (6TH AVENUE)
NEW YORK, NY 10036-2714

EXAMINER

GONZALEZ, AMANCIO

ART UNIT	PAPER NUMBER
----------	--------------

2617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/11/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/798,307	Applicant(s) HOSOMI, TAKAHIRO	
	Examiner Amancio Gonzalez	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :09/01/2006, 11/23/2005, 03/12/2004 .

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The applicant states on line 9 that "the controller generates a period of time" and fails to define in the specification what is meant, for the purpose of the present invention, to generate a period of time. The examiner understands that, time, or a fraction of it, as a period, is not possible to be generated, that is, created, by any know mechanism, resulting in the invention being unpatentable.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention. As stated on the rejection under 35 U.S.C. 112, first paragraph, above, the subject matter of "generating a period of time" is unclear and not defined in the specification, thus failing to particularly point out and distinctly the claimed invention.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1, 2, 4, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramesh et al. (US Pat 6212368), herein after Ramesh, in view of Scherzer et al. (US Pat 6799026), herein after Scherzer.

Consider claim 1 Ramesh discloses a wireless terminal device, comprising a plurality of antennas (**see Ramesh: col. 4 lines 42-45 and 59-61, col. 5 lines 7-15 and 38-44, col. 8 lines 24-30, figs. 1, 2, and 6**). Ramesh discloses a radio section for receiving radio waves from a base station via one of the antennas (**see Ramesh: col. 5**

lines 38-44, col. 6 lines 50-63, fig. 4, col. 8 lines 46-48). Ramesh discloses a reception level measuring section for measuring a reception level of the antennas including a antenna that is currently receiving and/or transmitting radio waves (**see Ramesh: col. 8 lines 30-40 and 51-67, col. 9 lines 1-9, figs. 6 and 7).**

Ramesh discloses wherein a **strategic timing is used to minimize the impact of measurements on the proper operation of the communications, which one of ordinary skill in the art at the time of the invention would substitute for what the applicant calls the controller that generates a period of time (see rejection under U.S.C. 112 rejection above)** in which transmission and reception is temporarily interrupted without disconnection in data communication (**see Ramesh: col. 4 lines 10-19, col. 7 lines 5-17**), the reception level measuring section measures at least one of the antennas reception level except the receiving and/or transmitting antenna in the period of time, switching antenna when the reception level of the receiving and/or transmitting antenna is equal to or less than the reception level in the period of time (**see Ramesh: col. 8 lines 45-61, fig. 7**), but fails to mention controller, an element to which the functions described above inherently correspond to perform. Scherzer discloses a controller for controlling the switch between the two antennae (**see Scherzer: Abstract, col. 4 lines 17-32, fig. 5 element 52**).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Ramesh and have a controller included in the description, as taught by Scherzer, thereby implementing a diversity reception of

downlink signals at the handset without requiring dual receive chains, as discussed by Ramesh (see Ramesh: col. 4 lines 2-4).

Consider claim 2, Ramesh, as modified by Scherzer, teaches claim 1 above, and further discloses wherein the reception level measuring section receives data in a certain channel from the base station (see Ramesh: col. 8 lines 30-45).

Consider claim 4, Ramesh, as modified by Scherzer, teaches claim 1 above, and Scherzer further discloses measuring received signal strength from the base station (see Scherzer: col. 1 lines 60-62).

Consider claim 6, Ramesh, as modified by Scherzer, teaches claim 1 above, and further discloses wherein the time period in which transmission and reception is temporarily interrupted is generated when performing communication by a communication method that requires continuous transmission and reception during communication (see Ramesh: col. 7 lines 5-55).

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ramesh et al. (US Pat 6212368), herein after Ramesh, in view of Scherzer et al. (US Pat 6799026), herein after Scherzer, as applied to claim 2 above, further in view of Toskala et al. (US Pat 7079507), herein after Toskala.

Consider claim 3, Ramesh, as modified by Scherzer, teaches claim 2 above, but does not particularly refer to signal measurement from a broadcast channel. Toskala discloses signal measurements from a broadcast channel (see Toskala: col. 5 lines 66-67 and col. 6 lines 1-2). It would have been obvious to a person of ordinary skill in the

art at the time the invention was made to modify the invention of Ramesh as modified by Scherzer and have broadcast channel signal measurements included, as taught by Toskala, thereby monitoring signal power levels from the base station in order to appropriately control the switching between the antennae according to the strongest received signal.

9. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ramesh et al. (US Pat 6212368), herein after Ramesh, in view of Scherzer et al. (US Pat 6799026), herein after Scherzer, as applied to claim 1 above, further in view of Harano (US Pat 6771944).

Consider claim 5, Ramesh, as modified by Scherzer, teaches claim 1 above, but does not particularly refer to inner or extensible antenna. Harano discloses a wireless device with inner antenna and extensible antenna (wipe antenna reads on extensible antenna –see Harano: col. 1 lines 23-27, fig. 1). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Ramesh as modified by Scherzer and have an inner and a whip antenna included, as taught by Harano, thereby implementing a diversity receiving wireless terminal which includes a plurality or antennae.

10. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramesh et al. (US Pat 6212368), herein after Ramesh, in view of Scherzer et al. (US Pat 6799026), herein after Scherzer, as applied to claim 1 above, further in view of

Vayanos et al. (US Pat 6985473).

Consider claim 7, Ramesh, as modified by Scherzer, teaches claim 1 above, but does not particularly refer compressed mode in a W-CDMA system. Vayanos discloses compressed mode in a W-CDMA system (see Vayanos: Title, col.1 lines 17-21 and 52-65). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Ramesh as modified by Scherzer and have compressed mode in a W-CDMA system included, as taught by Vayanos, thereby determining and applying transport format combinations for data transmission in a wireless communication system.

Consider claim 8, Ramesh, as modified by Scherzer and Vayanos, teaches claim 7 above, and further discloses spreading and despreading (see Ramesh: col. 6 lines 38-47).

Conclusion

11. Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

12. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Amancio González, whose telephone number is (571) 270-1106. The Examiner can normally be reached on Monday-Thursday from 7:30am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Nick Corsaro can be reached at (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Amancio González
AG/ag

January 6, 2007


NICK CORSARO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600